

AMENDMENTS TO THE CLAIMS

Claims 1-42 (Cancelled)

Claim 43 (Currently Amended) A method of starting a first routing device connecting a plurality of networks to which a plurality of routing devices are connected,

wherein each routing device stores master router data for each network to which the routing device is connected and network identification data,

wherein the master router data stored by each routing device indicates whether the respective routing device is a master router or a slave router with respect to each network to which the respective routing device is connected,

wherein, with respect to each network, one of the routing devices connected thereto the master router is a router that is connected to a network, from among the plurality of networks connected to each routing device, that is also connected to a network nearer-nearest to a parent router, which that assigns the network identification data to identify the networks, is the master router, and

wherein, with respect to each network, one or more of the routing devices connected thereto that the slave router is a router that is not connected to a network other than the network nearer-nearest to the parent router, is the slave router from among the plurality of networks connected to each routing device, and

wherein the network identification data of each respective routing device identifies a network to which the respective routing device is connected,

the method of starting the first routing device comprising:

requesting, by the first routing device, the master router data from each routing device connected to ~~any of the networks to which the first routing device is connected~~ connects; acquiring the master router data in response to the requesting of the master router data;

determining, from the acquired master router data, a number of detected master routers connected to the networks to which the first routing device is connected; and

disabling a router function of the first routing device when, in relation to the networks to which the first routing device ~~is connected~~ connects, ~~a, the determined~~ number of detected master routers ~~connected to any of the networks to which the first routing device connects~~ is zero or two or more, such that a loop path is prevented from forming between the first routing device and the plurality of routing devices, ~~the number being based on acquired master router data received from the routers in response to the requesting of the master router data~~

wherein the routing function of the first routing device allows the first routing device to connect to a network, such that when the router function is disabled, the first routing device cannot connect to the network.

Claim 44 (Previously Presented) The method according to claim 43, wherein, when receiving data relating to a request for an attribute of a routing device, a routing device returns a response, even if a hop count is zero and the network identification data of the source of the received data is different from the network identification stored in the routing device which received the request for the attribute.

Claim 45 (Previously Presented) The method according to claim 43, wherein, when a communication device connected to the networks stores network identification data to identify a network to which the communication device connects, the method further comprises transmitting requests for reading out network identification data to communication devices connected to any of the networks to which the first routing device is connected, and disabling the router function of the first routing device when a configuration of the networks to which the first routing device is connected is different from a configuration of networks stored by the first routing device.

Claim 46 (Previously Presented) The method according to claim 43, further comprising transmitting a request for reading out information relating to the parent router to a routing device which stores master router data indicating a master router.

Claim 47 (Previously Presented) The method according to claim 43, wherein only the master router requests writing of the network identification data to communication devices other than the routing devices, the master router accepts a request for writing the network identification data only from the parent router, and the parent router does not accept the request for writing the network identification data.

Claim 48 (Currently Amended) A first routing device connecting a plurality of networks to which a plurality of routing devices are connected,

wherein each routing device stores master router data for each network to which the routing device is connected and network identification data,

wherein the master router data stored by each routing device indicates whether the respective routing device is a master router or a slave router with respect to each network to which the respective routing device is connected,

wherein, with respect to each network, one of the routing devices connected thereto the master router is a router that is connected to a network, from among the plurality of networks connected to each routing device, that is also connected to a network nearer-nearest to a parent router, which that assigns the network identification data to identify the networks, is the master router, and

wherein, with respect to each network, one or more of the routing devices connected thereto that the slave router is a router that is not connected to a network other than the network nearer-nearest to the parent router, is the slave router from among the plurality of networks connected to each routing device, and

wherein the network identification data of each respective routing device identifies a network to which the respective routing device is connected,

the first routing device comprising:

a requesting section for requesting the master router data from each routing device connected to any of the networks to which the first routing device is connected ~~connects~~;

a receiving section for receiving the master router data in response to the requesting of the master router data by the requesting section;

a determining section for determining, from the received master router data, a number of detected master routers connected to the networks to which the first routing device is connected; and

a disabling section for disabling a router function of the first routing device when, in relation to the networks to which the first routing device is connected, the determined ~~connects~~, a number of detected master routers ~~connected to any of the networks to which the first routing device connects~~ is zero or two or more, such that a loop path is prevented from forming between the first routing device and the plurality of routing devices, ~~the number being based on acquired master router data received from the routers in response to the request from the requesting section~~

wherein the routing function of the first routing device allows the first routing device to connect to a network, such that when the router function is disabled, the first routing device cannot connect to the network.

Claim 49 (Previously Presented) The method according to claim 44, further comprising transmitting a request for reading out information relating to the parent router to a routing device which stores master router data indicating a master router.

Claim 50 (Previously Presented) The method according to claim 45, further comprising transmitting a request for reading out information relating to the parent router to a routing device which stores master router data indicating a master router.

Claim 51 (Previously Presented) The method according to claim 44, wherein only the master router requests writing of the network identification data to communication devices other than the routing devices, the master router accepts a request for writing the network identification data

only from the parent router, and the parent router does not accept the request for writing the network identification data.

Claim 52 (Previously Presented) The method according to claim 45, wherein only the master router requests writing of the network identification data to communication devices other than the routing devices, the master router accepts a request for writing the network identification data only from the parent router, and the parent router does not accept the request for writing the network identification data.

Claim 53 (Previously Presented) The method according to claim 46, wherein only the master router requests writing of the network identification data to communication devices other than the routing devices, the master router accepts a request for writing the network identification data only from the parent router, and the parent router does not accept the request for writing the network identification data.

Claim 54 (Previously Presented) A computer-readable recording medium having a program recorded thereon, the program causing a computer to execute the method of claim 43.

Claim 55 (Previously Presented) A computer-readable recording medium having a program recorded thereon, the program causing a computer to execute the method of claim 44.

Claim 56 (Previously Presented) A computer-readable recording medium having a program recorded thereon, the program causing a computer to execute the method of claim 45.

Claim 57 (Previously Presented) A computer-readable recording medium having a program recorded thereon, the program causing a computer to execute the method of claim 46.

Claim 58 (Previously Presented) A computer-readable recording medium having a program recorded thereon, the program causing a computer to execute the method of claim 47.

Claim 59 (Previously Presented) The method according to claim 43,
wherein the method is performed when the first routing device is newly connected to the network and when the first routing device replaces a previous router.